REMARKS

STATUS OF CLAIMS

Claims 1-10 have been pending.

Claim 10 is rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by Perfit et al. (U.S. Patent 6,535,728).

Claims 1-4 and 6-10 are amended. Claim 5 is cancelled without disclaimer or prejudice. Thus, claims 1-4 and 6-10 remain pending for reconsideration, which is respectfully requested.

No new matter has been added in this Amendment. The forgoing rejections are hereby traversed.

Entry of the amendments and consideration of the remarks is respectfully requested, in view of the personal interview with the Examiner on October 6, 2004. More particularly, this Amendment is filed after the filing of the RCE on August 6, 2004 and in reply to the final Office Action mailed March 8, 2004 and in reply to the Advisory Action of July 13, 2004, because in view of the Examiner interview of October 6, 2004, so that the claims can be further amended, the Examiner did not enter the After Final Amendment of June 8, 2004 pursuant to the Advisory Action of July 13, 2004 and the Examiner also did not enter the After Final Amendment of June 8, 2004 after the filing of the RCE pursuant to the outstanding Office Action of October 12, 2004.

CLAIM AMENDMENTS

In view of the interview with the Examiner, the independent claims are amended as discussed below.

In contrast to Perfit, the independent claims 1, 9 and 10 are amended by reciting, "analyzing a ~~CTI server state condition~~ *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call,* to generate *a parameter* based on the state ~~condition~~conditions of ~~in the CTI server for~~ the call, *the parameter representing a presumed psychological state of a*the *customer using the telephone terminal*" (e.g., independent claim 1).

Further, the claims of the present Application expressly recite, "wherein the analysis means *analyzes state condition of the call to generate the parameter* representing the

presumed psychological state of the customer by *analyzing at least incoming call data obtained when the call from the telephone terminal has arrived, dealing data on dealing with the call from the telephone terminal, and transfer data on transfer of the call from the telephone terminal,* each representing the *state conditions of the call*" (e.g., independent claim 1 as amended). And the recitation, "*at least incoming call data obtained when the call from the telephone terminal has arrived, dealing data on dealing with the call from the telephone terminal, and transfer data on transfer of the call from the telephone terminal*" are tangible data, not abstract, and, thus, clearly patentable subject matter.

Further, for clarity, the independent claims expressly tie the "wherein" clause to the recitation, "analyzing a ~~CTI server state condition~~ *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call, to generate a parameter* ... representing a presumed psychological state" by reciting, "wherein the analysis means *analyzes state condition of the call to generate the parameter* representing the presumed psychological state of the customer by *analyzing* ..."

Support for the claim amendments can be found, for example, on page 6, lines 10-21; page 7, line 22 to page 10, line 18, of the present Application. In view of the claim amendments, withdrawal of the rejection of pending claims over Perfit and allowance of the pending claims is respectfully requested.

IN THE SPECIFICATION

According to the forgoing, page 1, line 30 of the specification is amended by replacing the term "impossible" with "possibly unreliable," which is more accurate, taking into consideration the Examiner's comment on page 2, item 4 of the final Office Action concerning impossibility in understanding the customer's presumed psychological state from communications over the phone. Support for the specification amendment can be found, for example, on page 1, line 32 to page 2, line 8, and page 3, lines 3-12, of the present Application.

Also, in the Advisory Action of July 13, 2004, Continuation Sheet, item 1, the Examiner provides, "changing the statement on page one of the specification, line 30 from "impossible" to "possibly unreliable" does not remove the level of difficulty in accurately determining the customer's presumed psychological state." The Examiner also provides that Perfit recognizes this difficulty and includes a human analyst.

However, the claimed present invention has a benefit of increasing the accuracy of determining a customer's presumed psychological state in a call handling system by not using a human analyst, but by "analyzing a ~~CTI server state condition~~ *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call.*" More particularly, amended independent claim 1 provides:

> ... analyzing a ~~CTI server state condition~~ *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call,* to generate *a parameter* based on the state ~~condition~~conditions of ~~in the CTI server for~~ the call, *the parameter representing a presumed psychological state of a*the *customer using the telephone terminal,*

>> wherein the analysis means *analyzes state condition of the call to generate the parameter* representing the presumed psychological state of the customer by *analyzing at least incoming call data obtained when the call from the telephone terminal has arrived, dealing data on dealing with the call from the telephone terminal, and transfer data on transfer of the call from the telephone terminal,* each representing the *state conditions of the call* (e.g., independent claim 1).

Page 3, lines 3-8, of the present specification discloses, "... parameter which represents the customer's presumed psychological state can be obtained on the basis of the *actual state of the call from the telephone terminal.* Thus, ... not only of the elapsed time but also the number of times that the customer's call has been transferred, the time for which the customer has remained silent, and the like."

EXAMINER OPINION ON PAGE 2, ITEM 4, OF THE FINAL OFFICE ACTION & REJECTION UNDER 35 USC 112, FIRST PARAGRAPH

Claim 10 is rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement.

In page 2, item 4, of the Office Action, the Examiner asserts

> Considering the nature of the invention, the use of the term psychological is an unreasonable expansion in both the specification and the claims related to the measured descriptors. The subject matter related to psychology is indeed very complex and in no way can be summarized as a function of "elapsed time," "number of times the customer's call has been transferred," "the time for which the customer has remained silent during the communication with the operator," etc. Such a simplistic model will in no way represent the *psychological state* of the individual on the phone. In fact, the applicant agrees with the Examiner on

the point of such a concern as noted in the specification at page 1, lines 29-32: ... "and it is impossible to understand the customer's presumed psychological state such as his or her unpleasant or other feelings which result from the communication over the phone."

The Examiner solely relies on page 1, lines 29-32 of the specification regarding impossibility of understanding the customer's presumed psychological state from communications over the phone. If, however, the specification, page 1, lines 29-32, is considered in view of the specification on page 1, line 32 to page 2, line 8, and page 3, lines 3-12, the specification conveys a more likely circumstance (other than impossibility as suggested by the Examiner), in which elapsed time of a call within a call handling system alone might not provide an accurate caller psychological state, whereas with other call factors within the call handling system relating to the "*state conditions of the call* ... *concurrently with the call, during the call, and/or after the call*," such as number of times the customer's call has been transferred, the time for which the customer has remained silent, and the like, a more accurate psychological state can be derived.

Therefore, regarding the Examiner's opinion on page 2, item 4, of the final office action, that "such a simplistic model will in no way represent the *psychological state* of the individual on the phone," which relates to the present claimed invention's use of measured descriptor of "*state conditions of the call*," such as "number of times the customer's call has been transferred," etc., Applicants respectfully assert that (1) the Examiner's assertion is not based on any evidence provided by the Examiner (see, for example, MPEP 2164.04, 05), (2) the Examiner's assertion is contrary to the present specification page 3, lines 3-12, page 5, lines 20-32; page 6, lines 10-21; and page 10, lines 5-18, (3) the Examiner's assertion is contrary to the Examiner position relying on Perfit to allege a fraud event can represent a psychological state (page 5, last three sentences, of the final Office Action), and (4) according to the forgoing independent claims 1, 9 and 10 are amended for clarity taking into consideration the Examiner's comments.

As far as the 35 USC 112, first paragraph, rejection of independent claim 10, that "psyche parameter" is not enabled, the Applicants assert that claim 10 is amended consistent with independent claims 1 and 9 to clearly define the phrase "psyche parameter" by reciting, "*analyzing ~~computer server~~ state conditions of the received telephone terminal call concurrently with the call, during the call, and/or after the call,* to generate at least one *customer psyche parameter based on the state conditions ~~in the computer server for~~ of the received telephone terminal call*, the at least one psyche parameter representing a

presumed psychological state of the calling customer." Support and enablement for claim 10 is provided in the other independent claims 1 and 9, and in the specification on page 3, lines 3-11; page 5, lines 20-32; page 6, lines 10-21; and page 7, line 22 to page 10, line 18, of the present Application. See also, page 10, line 19 to page 17, line 18, and page 26, lines 15-28, which provide specific examples of how the present invention generates at least one customer psyche parameter based on "*state conditions of the call* ... *concurrently with the call, during the call, and/or after the call*," in the computer server for the received telephone terminal call.

The Applicants respectfully assert that the specification contains a written description of the invention and of the manner and process of making and using the invention in full, clear, concise, and exact terms as to enable any person skilled in the art to make and use the same, because analysis of any "*state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call*," in the CTI server can be used to generate a parameter based thereon. For example, if the CTI server indicates that the call has been transferred to 10 different operators within the CTI server, an "angry" or even "happy" (as the case may be) "*psyche parameter*" would be assigned to a call that meets such a condition in the CTI server. Amended claim 10 now clearly recites, "*analyzing* ~~*computer server*~~ *state conditions of the received telephone terminal call* *concurrently with the call, during the call, and/or after the call*, to generate at least one *customer psyche parameter based on the state conditions* ~~*in the computer server for*~~*of the received telephone terminal call*, the at least one psyche parameter representing a presumed psychological state of the calling customer." According to the present invention, "*state conditions of the call* ... *concurrently with the call, during the call, and/or after the call*," are monitored to presume a psychological state of the caller, which the claimed invention takes advantage, and enabled in the specification, for example, in page 6, lines 10-21; page 7, line 22 to page 10, line 18.

In the Advisory Action of July 13, 2004, Continuation Sheet, item 2, the Examiner also provides that the claimed present invention's, "*psyche parameter*," which is recited in independent claim 10, is not contained in the disclosure. And, in response to the previous remarks by the Applicant that any state condition of the call from the telephone terminal in the CTI server can be used to generate a parameter based thereon, the Examiner provides, "the aspect of novelty is missing and the situation is immediately obvious." However, the Applicants remarks were in the context of non-enablement raised by the Examiner, and did not suggest obviousness of the present invention, to clarify that one skilled in the art can make and use the present invention by programming a computer according to disclosed patentably distinguishing processes of the present invention.

REJECTIONS UNDER 35 U.S.C. §102

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by Perfit et al. (U.S. Patent 6,535,728).

PERFIT

Perfit discloses that "... The fraud detection system 100 comprises ... a fraud database 108, ..." (column 5, lines 6-9), and that "... The fraud database 108 includes ... suitable processing power to execute programs that access and maintain a database of subscribers that have committed fraud, or ... " (column 5, lines 44-47).

However, Perfit only provides the fraud database 108 which is one of investigation resources applying to high-risk subscribers and events (Abstract). Namely, Perfit only discloses that "... The fraud database 108 also executes programs to examine ... changes to account information, ... (column 5, lines 48-50), and that "... The provisioning loader also forwards new and changed account data to the fraud database 108" (column 5, lines 65-66). Therefore, Perfit analyzes only the account data or the like. In other words, Perfit does not disclose or suggest the claimed present invention's analysis of incoming call data, dealing data, and transfer data, as "***state conditions* of the call** ... ***concurrently with the call, during the call, and/or after the call***," in a CTI server handling the call, and Perfit does not disclose or suggest generating parameters based upon such analysis of "***state conditions* of the call**."

Independent claims 1, 9 and 10 have been amended to further emphasize the patentably distinguishing features of the present claimed invention by incorporating the features of dependent claim 5 into the independent claims 1, 9 and 10 and by reciting, "analyzing a~~CTI server state condition~~ ***state conditions*** of the call from the telephone terminal ***concurrently with the call, during the call, and/or after the call,*** to generate ***a parameter*** based on the state ~~condition~~conditions of ~~in the CTI server for~~ the call, ***the parameter representing a presumed psychological state of a***the ***customer using the telephone terminal***." Support for the claim amendments can be found, for example, in page 3, lines 3-11; page 5, lines 20-32; page 6, lines 10-21; and page 7, line 22 to page 10, line 18, of the present Application. See also, page 10, line 19 to page 17, line 18, and page 26, lines 15-28, which provide specific examples of how the present invention generates at least one customer psyche parameter based on the state conditions of the call in the computer server.

In particular, the Examiner, in page 8 of the final Office Action, relies on Perfit, column 11, lines 13-42, to reject dependent claim 5 now incorporated in independent claims 1, 9 and 10. However, Perfit in column 11 lines 13-42 discloses events 420 generated based upon a

11

subscriber's account information, which can suggest fraud, such as changes in account information. In contrast to Perfit's generated events based upon the subscriber's account information, the claimed present invention provides, "analyzing a CTI server state condition *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call,* to generate *a parameter* based on the state conditionconditions of in the CTI server for the call, *the parameter representing a presumed psychological state of athe customer using the telephone terminal*, wherein the analysis means *analyzes state condition of the call to generate the parameter* representing the presumed psychological state of the customer by *analyzing at least incoming call data obtained when the call from the telephone terminal has arrived, dealing data on dealing with the call from the telephone terminal, and transfer data on transfer of the call from the telephone terminal,* each representing the *state conditions of the call.*"

In the Advisory Action of July 13, 2004, Continuation Sheet, item 3, the Examiner relies on Perfit, column 2, lines 63-67, which discloses "detecting telecommunications fraud according to ... means for receiving one or more events relating to a subscriber." The Examiner appears to assert that Perfit's detecting telecommunications fraud based upon one or more events relating to a subscriber "would include related phone operating data," and thus similar to the claimed present invention. However, Perfit only provides the fraud database 108, which is one of investigation resources applying to high-risk subscribers, and the fraud database 108 generates fraud events, which are based upon fraudulent activity associated with a subscriber (column 5, lines 43-49; column 6, lines 11-25). Perfit only discloses, "The fraud database 108 also executes programs to examine ... changes to account information, ... (column 5, lines 48-50), and "The provisioning loader also forwards new and changed account data to the fraud database 108" (column 5, lines 65-66). In other words, in Perfit, the fraud database 108 generates events that relate to the subscriber's fraudulent activities, but do not relate to "*state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call.*" Therefore, Perfit's "one or more events relating to a subscriber" relate to analyzing fraudulent activity of the subscriber, such as changes to account information, based upon the fraud database 108, and therefore, Perfit is silent on analyzing phone operating data.

In contrast to Perfit, the claimed present invention as recited in independent claims 1, 9 and 10, using claim 1 as an example, provides "analyzing *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call.*" In other words, Perfit does not disclose or suggest the present claimed invention's analysis of incoming call data (FIG. 3A), dealing data (FIG. 3B), and transfer data (FIG. 3C), in a CTI server handling

the call, and Perfit does not disclose or suggest generating parameters that represent a presumed psychological state of the customer based upon such analysis of "*state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call*."

In view of the claim amendments and remarks, it is believed that independent claims 1, 9, and 10, and dependent claims thereof (generally, as amended to improve form), are in condition for allowance, which is respectfully requested.

DEPENDENT CLAIM 6

In the Advisory Action of July 13, 2004, Continuation Sheet, item 5, the Examiner also relies on Perfit, column 2, lines 63-67 and column 3, lines 1-2, for disclosing development of parameters related to incoming calls and analyzing them related to fraud. However, Perfit for a calling subscriber analyzes the caller's fraudulent activity information based upon the fraud database events, which differs from the claimed present invention's, "analyzing *state conditions of the call* from the telephone terminal *concurrently with the call, during the call, and/or after the call*."

In contrast to Perfit, amended dependent claim 6 provides some examples of generating "a parameter based on the state conditions of the *call*," as follows:

> 6. (CURRENTLY AMENDED) A CTIThe CTI server according to claim 1, wherein the analysis means generates a first and second parameters, the first parameter being based on information *directly related* to a psychological *state of the customer concerning the call* from the telephone terminal by being generated by *analyzing first state conditions comprising at least one of waiting time of the call from the telephone terminal and ratio of speechless periods of the call from the telephone terminal*, and the second parameter being based on other information *not directly related* to the psychological state of the customer by being generated by *analyzing second state conditions comprising at least one of number of incoming calls of calls from the telephone terminal and number of speechless periods of the calls from the telephone terminal*.

Support for the dependent claim 6 amendments can be found, for example, on page 8, line 6 to page 9, line 23; page 10, line 19 to page 17, line 18; and page 26, lines 15-28 of the present Application.
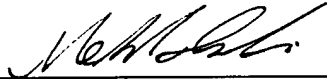
CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
STAAS & HALSEY LLP

Date: 10/28/2004   By: _____

Mehdi Sheikerz
Registration No. 41,307

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501